

## PRODUCTION OF BEARING RING FOR BALL BEARING

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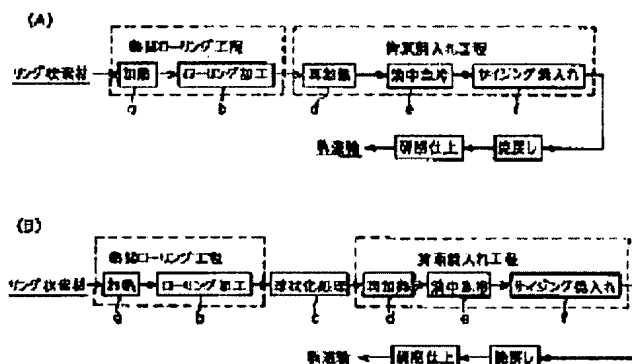
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### Abstract of JP9176740

**PROBLEM TO BE SOLVED:** To provide a method for producing a bearing ring for a ball bearing from a ring-shaped stock obtd. by subjecting a bearing steel to hot forging and in which cold working for forming the conventional ball shaft grooves and spheroidizing annealing for the cold working are eliminated, groove working by hot working and a quenching stage are continued and the cost effectiveness of heat energy, the reduction of the working time, the simplification and effectiveness of the process are attained.

**SOLUTION:** A ring-shaped stock is heated, and by hot rolling working, the formation of ball shaft grooves and expansion rolling are executed. Next, it is reheated without cooling, is austenitized, is rapidly cooled to directly above the Ms point in oil and is subjected to sizing die quenching. The finishing temp. of the hot rolling working is regulated to the Ar1 point or below to  $\geq 500$  deg.C, and spheroidizing is executed in the process of the reheating to refine carbides.



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